

converting the reference number into the consumer's card number by the issuing bank and applying the transaction amount to the consumer's balance in his credit card or deposit account.

54. (New) The method of Claim 1 further comprising the step of:

proving that the issuing bank authorized the payment to the merchant by the combination of the issuing bank's signature on the authorization token, digital certificate, and the contents of the authorization token, providing undeniable proof that the issuing bank authorized the payment.

#### **REMARKS**

Reconsideration and allowance of the claims in the application are requested.

Claims 1-50 are in the case. Claims 1-14 and 16-50 have been rejected under 35 USC 103(a) as unpatentable over Payne; Anderson; and O'Mahony et al., Ogram et al. of record. Claim 15 has been rejected under 35 U.S.C. §103 as unpatentable over: Payne et al; Elgamal, Gifford, Anderson; O'Mahoney and Ogram et al. of record.

Applicant's has amended claims 1, 26, 27, 28, 33, 34, 46, and 49 to further distinguish over the cited art. Claim 50 has been amended to depend upon 49. Claims 51 – 54, dependent upon Claim 1, have been added for more specific protection of Claim 1.

Before supporting the patentability of amended Claims 1, 26, 27, 28, 33, 34, 46, and 49 and in response to Office Paper 9, Applicant provides additional reasons why the cited art may not be combined in the manner applied by the Examiner in rejecting Claims 1 – 14, and 16 - 50, for reasons, as follows:

(i) Payne fails to disclose a digital certificate from an acquiring bank and the

Examiner incorporates into Payne a digital certificate of Elgamal. However, Elgamal discloses at col. 9, lines 55-59 a digital certificate from an issuing bank not from an acquiring bank as claimed.

(ii) Payne fails to disclose a wallet initiation message. The Examiner substitutes O'Mahoney as providing a wallet initiation message. However, the O'Mahoney wallet initiation message only includes a summary of the item, price and transaction I.D. The O'Mahoney wallet initiation message does not include an order description, a time stamp and a nonce. which are necessary for the claimed invention to function. Not any wallet initiation message will enable a worker skilled in the art to implement the claimed invention.

(iii) Payne does not disclose the issuing gateway or issuing banks sending a token containing a random nonce. Gifford is cited as disclosing a payment order or token that includes a random nonce. Gifford states..."a sender unique nonce is an identifier that is used only once by a given sender." The nonce issued in Gifford is from the sender making a payment not from the issuing bank as claimed.

Thus, Elgamal, O'Mahoney and Gifford do not provide the missing teachings in Payne. Accordingly, without a teaching of the claimed elements in the prior art, there is no basis for a worker skilled in the art to implement the invention and the rejection of Claims 1 – 14 and 16 – 50 should be withdrawn. .

The cited art may not be combined to reject Claim 15 for reasons, as follows:

(i) Payne does not explicitly show a direct connection for sending an authorization token from the payment computer to the merchant as recited in Claim 15. Ogram is cited as showing a payment computer directly connected to the merchant computer for sending a message to ship the product after payment has been authorized by the consume. The message is not an

authorization token which the merchant uses to validate that payment is authorized by the issuer.

Accordingly, Ogram does not supply the missing element in Payne relative to a direct connection to the merchant computer for supplying an authorization token to the merchant computer. Without such there is no basis for a worker skilled in the art to modify Payne with Ogram and implement Claim 15. The rejection of claim 15 should be withdrawn.

Summarizing, the prior art does not provide the missing elements in Payne and can not be combined with Payne as a basis for rejecting Claims 1 – 50 under 35 USC 103 (a). Applicant submits there is no support for the rejection of Claims 1 – 50 under 35 USC 103(a) based upon Payne, in view of Elgamal, O'Mahoney, Gifford and Ogram, alone or in combination failing to provide the teachings necessary for a worker skilled in the art to implement the invention of Claims 1 – 50 and the rejection should be withdrawn.

Moreover, the Examiner is attempting to construct Applicant's four-party payment protocol with three-party payment prior art which inherently fails as a basis for a worker skilled in the art to implement Applicant's invention defined in Claims 1 – 50. There is no teaching in the cited art which would enable a worker skilled in the art to convert a 3 party payment protocol to a four-payment protocol as defined in Claims 1 – 50.

In any case, independent Claims 1, 26, 27, 28, 33, 34, 46, and 49 have been further amended to describe additional features of a four party payment protocol, as follows:

(i) “the issuing bank creating a reference number or value representing the consumer's credit or debit card number by preparing a table of credit card or debit card numbers and a corresponding table of reference numbers, the issuing bank pairing the consumer's card number with a selected reference number and outputting the reference number to the issuer gateway; “

The reference number is included in the authorization token to protect the credit or debit card number from public disclosure. Payne discloses a payment computer creating an access URL that includes a merchant computer identifier, a domain identifier, a product identifier, an indication of the end of the duration time for which the access to the product is to be granted, the environment network address and an access URL authenticator, that is, an additional signature based on a cryptographic key. Contrary to the Examiners claim in Col 7, lines 14 – 30, there is no disclosure in Payne of the issuing bank creating a reference number to protect the consumer's credit or debit card number from public disclosure and possible fraud.

Claims, 26, 33, 34, and 49 have been amended to recite further features of a four party payment protocol, as follows:

(ii) “sending a capture request message including the reference number representing the consumer's card number over the internet from the merchant to an acquirer gateway operating on behalf of an acquirer bank to capture the transaction and disburse payment to the merchant.

None of the cited references disclose sending a capture request message including a reference number from the merchant to the acquiring or merchant bank for payment. In all of the cited references the payment or issuing bank makes payment to the merchant, not the acquiring or merchant bank, as claimed.

Moreover none of the cited references describe a four-party payment protocol. Examiner alleges that Section 2.3, pgs. 12-13 describes a four-party payment connection. Unfortunately, the O'Mahoney reference provided by the Examiner did not include page 13 and so Applicant is not able to respond to the Examiner's allegations. However, O'Mahoney at Fig. 4-10 describes a cyber cash model showing four parties interacting through the same cyber case server. Fig. 4-10 does not show the consumer dealing with an issuing bank through a first gateway and a merchant

dealing with a merchant bank through a second and different gateway as described in the claims.

Claims 26, 33 and 34 further describe additional four party payment protocol features, as follows:

(iii) “converting the reference number into the consumer’s card number by the issuing bank and applying the transaction amount to the consumer’s balance in his credit card or deposit account. “

Payne discloses “The payment computer records the product identifier, the domain the user account, the merchant account the end of duration time, and the actual amount in the settlement database” (Col. 7, lines 27 –30. There is no disclosure of converting a reference number to a credit card number and applying the transaction amount to the consumer’s balance. Like wise, Applicant can not find converting the reference number to credit card number is Elgamal, O’Mahoney, Gifford and Ogram.

Claims further 33, 34 and 49 describe still further four party payment protocols, as follows:

(iv) “settling accounts with the issuing bank by the acquiring bank over a private network by sending a settlement message that includes the reference number to the consumer's card number.”

None of the cited references describe the issuing bank and the acquiring bank settling accounts because the acquiring or merchant bank does not exist in a three party payment protocol.

Summarizing, the amendments to Claims 26, 33, 34, 46 and 49 further limit a four party payment protocol which incorporates a reference number to protect the privacy of the consumer’s credit card. The cited three party payment protocol references do not anticipate or

teach or suggest the claimed features to a worker skilled in the art, and provide no support for the rejection of the amended claims. Allowance of the Claims is requested.

Applicant has added Claims 51 – 53 which depend on and further limit Claim 1 and are patentable over the cited art for the same reasons as described for Claims 26, 33, 34, 46 and 49.

Applicant has added Claim 54 which depends on Claim 1 and describes proving a merchant claim against an issuing bank, as follow:

“proving that the issuing bank authorized the payment to the merchant by the combination of the issuing bank’s signature on the authorization token, digital certificate, and the contents of the authorization token, providing undeniable proof that the issuing bank authorized the payment.”

Applicant submits that Payne and the other cited references do not address, describe or suggest the proving feature of Claim 54. Allowance of Claim 54 is requested.

Dependent Claims 2-25, 29-31, 34-45, 47, 48 and 50, all depend on independent claims which Applicant has distinguished over the prior art. The dependent claims are therefore patentable and allowable over the cited art for the same reasons as described for independent Claims 1, 26, 27, 28, 33, 34, 46 and 49.

**CONCLUSION:**

Having patentably distinguished the Claims and then amended the Claims to further distinguish over the cited prior art, Applicant respectfully allowance of Claims 1- 54 and passage to issue of the case.

The Commissioner is hereby authorized to charge any additional fees which may be required for the timely consideration of this amendment under 37 C.F.R. §§ 1.16 and 1.17, or credit any overpayment to Deposit Account No. 09-0464, Order No. SE9-98-031.

Respectfully submitted,

MORGAN & FINNEGAN, L.L.P.

Dated: December 27, 2000

By: Joseph C. Redmond, Jr.  
Joseph C. Redmond, Jr.  
Registration No. 18,753  
202-857-7887 – Telephone  
202-857-7929 – Facsimile

**CORRESPONDENCE ADDRESS:**

Morgan & Finnegan L.L.P.  
345 Park Avenue, 22<sup>nd</sup> Flr.  
Washington, D.C. 20006